Report From the Meeting of
CITEL PCC II WG-1 (WRC-07)
6-9 December 2004

The fourth meeting of the CITEL Permanent Consultative Committee II: Radiocommunications including Broadcasting, Working Group for the Preparation for WRC-07 was held in Buenos Aires, Argentina on December 6-9, 2004. The decisions of the meeting on WRC-07 agenda items are provided below.

Agenda item 1.1 – *requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, in accordance with Resolution 26 (Rev.WRC-97);*
With regard to this agenda item, Argentina, Canada, Dominican Republic and United States are of the view that in dealing with this agenda item, WRC-07 should continue to follow the precepts of Resolution **26 (Rev.WRC-97**), which encourages countries to delete their country footnotes or their country names from footnotes, and should adopt the approach used for this agenda item at WRC-03 and previous conferences. These administrations will review their respective country footnotes to the Table of Frequency Allocations with a view to determining their continued relevance.

Agenda Item 1.2 - *consideration of allocations and regulatory issues related to the Earth exploration-satellite (passive) service, space research (passive) service and the meteorological satellite service in accordance with Resolutions 742 (WRC-03) and 746 (WRC-03).*
Issue 1: Sharing between the passive services and the fixed and mobile services in the 36-37 GHz band (Res. 742) - With regard to this issue Canada supports the participation in ITU-R studies on this issue to ensure that any new regulatory measures that may be developed would not put undue constraint on services allocated in this band.

Issue 2: Sharing between the passive services and the fixed and mobile services in the 10.6-10.68 GHz band (Res. 746) -
Canada currently licenses fixed systems in the band 10.6-10.68 GHz. In addition, Canadian manufacturers produce point-to-point and point-to-multipoint equipment for both the Canadian and foreign markets. There is also an interest from Environment Canada to use the data gathered by existing or planned missions such as the Advanced Microwave Scanning Radiometer (AMSR), the National Polar-orbiting Operational Environmental Satellite System (NPOESS) and WINSAT. Since Canada has interest in both services, Canada intends to participate in ITU-R studies with a view to accommodate these Canadian interests.
Brazil supports the studies ongoing within ITU-R WPs 7C and 9D. In addition, it should be noted that the band 10.5-10.65 is extensively used in Brazil for fixed wireless access systems according to Annex 1 of Recommendation ITU-R F.1568.

Issue 3: Extension of the current 18.1-18.3 GHz geostationary meteorological satellites allocation in the space-to-Earth direction to 300 MHz of contiguous spectrum in the 18.0-18.4 GHz band (Res. 746) – With regard to this issue:

- Canada is of the view that any expansion of the MetSat allocation into the band 18.0-18.1 GHz should be governed by the same coordination conditions with the FS and MS as are currently applied in the band 18.1-18.3 GHz Canada recognizes that in order to protect the fixed and mobile services in the band, any expansion of the MetSat service (s-E) allocation will be required to conform to the existing pfd limits given in Table **21-4.**
- The United States and Canada recognize spectrum sharing difficulties between HDFSS GSO systems and MetSats in the upper sub-band at 18.3-18.4 GHz. These administrations favor consideration for a possible additional 100 MHz allocation in the lower sub-band at 18.0-18.1 GHz in Region 2.
- The United States and Canada are not in favor of an extension of the MetSat allocation into the 18.3-18.4 GHz band in Region 2 if it necessitates imposition of additional constraints on the FSS in this band.

Agenda Item 1.3 - *in accordance with Resolution 747 (WRC-03), consider upgrading the radiolocation service to primary allocation status in the bands 9 000-9 200 MHz and 9 300-9 500 MHz, and extending by up to 200 MHz the existing primary allocations to the Earth exploration-satellite service (active) and the space research service (active) in the band 9 500-9 800 without placing undue constraint on the services to which the bands are allocated;*

With regard to the protection of existing primary aeronautical radionavigation and radionavigation service in the 9 000-9 200 MHz and 9 300-9 500 MHz bands respectively, Canada and the United States are of view that while the bands 9 000-9 200 MHz and 9 300-9 500 MHz have a long history of successful co-band operations by the radionavigation and radiolocation services, new systems may not necessarily be compatible with existing systems. Therefore, Canada and the United States support measurement tests and ITU-R studies to verify the feasibility of sharing in these bands. If the outcome of these measurements and studies is favorable, Canada and the United States anticipate supporting the upgrading of radiolocation services to a primary status on the basis that the radiolocation service operating in the 9 000-9 200 MHz and 9 300-9 500 MHz bands should not constrain the use and development of the radionavigation service, operating in accordance with the Radio Regulations.
With regard to the possible allocations to the EESS (active) and SRS (active) in the 9 500-9 800 MHz band, Canada and the United States support the ongoing compatibility studies between the existing systems operating in the radiolocation and radionavigation services and the spaceborne radar systems operating under EESS (active) and SRS (active). Any expansion of the EESS (active) and SRS (active) allocation beyond the band 9 500-9 800 MHz should ensure that the incumbent services are protected. The United States is of view that such an extension could be supported provided that there is a favorable outcome from the sharing studies and that the incumbent services are protected.

Agenda Item 1.4 - *frequency-related matters for the future development of IMT-2000 and systems beyond IMT-2000 taking into account the results of ITU-R studies in accordance with Resolution* ***228 (Rev.WRC-03)***

With regard to this agenda item, the U.S. indicated that it supports the ongoing studies in ITU-R WP-8F that seek to ensure that the appropriate methodology for estimating spectrum is employed; that anticipated services are reasonable and realistic; and that the estimated spectrum needs are based on reasonable methodologies/services. The U.S. also recognized the special needs of developing areas of the world. In determining the need for identifying additional spectrum, already identified spectrum and the need to protect existing services must be taken into account. Based on the results of the aforementioned studies, the U.S. will determine whether it will support the identification of any additional bands for the deployment of IMT-2000 and systems beyond.

At the December 2004 meeting, Canada's preliminary view was added stating Canada supports and is participating in the studies being conducted in WP8F which will determine how much, if any, additional spectrum is required for the future development of IMT-2000 and systems beyond IMT-2000.

Agenda Item 1.5 - *spectrum requirements and possible additional spectrum allocations for aeronautical telecommand and high bit-rate aeronautical telemetry.*

1 With regard to this agenda item both Canada and United States expressed views in support of further studies in order to determine how best to satisfy this agenda item while recognizing protection of incumbent services. Upon completion of these studies, Canada and U.S. plan to make specific proposals. The December '04 meeting noted that there is a primary allocation to ARNS in the 5091-5150 MHz band in all Regions and that this band is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis in accordance with 5..444A

Agenda Item 1.6 - *additional allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz and 6 GHz, in accordance with Resolution 414 (WRC-03) and, to study current satellite frequency allocations, that will support the modernization of civil aviation telecommunication systems, taking into account Resolution 415 (WRC-03).*

Resolution 414 (WRC-03)

Canada expressed the following views:

1. Identify applications and spectrum requirements for AM(R)S to determine if new spectrum allocations are required
2. Review existing bands currently allocated to aeronautical services between 108 MHz and 6 GHz, ie; ARNS, Radiolocation for suitability to AM(R)S use.
3. If necessary, study compatibility of AM(R)S use with existing services in bands not allocated to aeronautical services.
4. Coexistence of MSS feeder links with AM(R)S in the band 5 091-5 150 MHz.
5. Potential revisions to current regulatory provisions to permit AM(R)S use.
6. Protection of non-aeronautical services (example MSS Feeder Links 5 091 – 5 150 MHz) operating as co-primary or secondary in bands allocated to ARNS.

United States expressed the following views:

1. Current aviation communication bands are severely congested. In addition, recent experience has shown that evolving technology for navigation and surveillance may necessitate allocations that are more encompassing than simply aeronautical radionavigation

service (ARNS). As a result, the United States anticipates supporting the addition of AM(R)S allocations in some frequency bands depending on the results of ITU-R studies. Toward that end, the United States will investigate, as a first step, the bands currently available for use by aeronautical systems in the frequency range between 108 MHz and 6 GHz. The United States also will seek to maintain compatibility with services in adjacent bands. In particular, the United States is of the view that any allocation changes in the 108-117.975 MHz band must be compatible with terrestrial broadcasting systems and place no additional constraints on the broadcasting service in the 87-108 MHz band.
2. The United States will seek to further investigate, in case the first step above would not lead to satisfactory results, also the frequency bands currently not available for use by aeronautical systems, subject to not constraining the existing and planned use of such bands, taking account of existing use and future requirements in these bands;
3. The United States will seek to investigate how to accommodate the requirements for aeronautical systems in the band 5 091-5 150 MHz, including the possibility of fixed service links limited to aeronautical applications at airports. In this regard the United States will seek to ensure that the operations of the existing FSS consistent with 5.444A are taken into account.

Resolution 415 (WRC-03):
Canada expressed the following views:
1. Study the current satellite frequency allocations that could meet the aeronautical requirements to support the modernization of civil aviation telecommunication systems, especially those in developing countries.
2. Study radio frequencies that could be used to support both ICAO communication navigation surveillance and air traffic management (CNS/ATM) systems and other non-aeronautical telecommunication services.
3. Noting that Resolution **34 (WRC-95)** urges the allocation of frequency bands to the most broadly defined services with a view to providing maximum flexibility in spectrum use, study the allocations and current use of the radio spectrum.
4. Possible impact on current usage of satellite frequency allocations by the introduction of aeronautical requirements, especially when a single spacecraft is used to provide a range of different services.
5. Compatibility of global commercial satellite services to support aeronautical telecommunications infrastructure.
6.
United States expressed the following views:
1. The United States supports the use of the Global Positioning System (GPS) as a constituent element of the GNSS.
2. That existing Fixed Satellite Service (FSS) spacecraft and appropriate earth stations can be used to create, augment or enhance infrastructure to support civil aviation telecommunications services, including non-safety related ICAO CNS/ATM applications.
3. The use of satellite-based facilities in connection with civil aviation applications will contribute to the overall improvement of the aviation communications infrastructure in developing countries and remote areas while at the same time could allow ready access to Internet based services for other purposes. However, since these applications are already

consistent with existing satellite frequency allocations and can be supported by existing or planned satellite networks, no action from WRC-07 is required in this respect.
4. That the extension of broadband digital access to aeronautical platforms is a necessary step in the modernization of civil aviation telecommunications systems and that this extension can be facilitated through the Aeronautical Mobile Satellite Service (AMSS) operating in the 14/11/12 GHz bands.. There is currently no AMSS downlink allocation and downlink signals operate under RR 4.4 in the 11/12 GHz band. The matching of the secondary AMSS uplink in the 14 GHz band with a secondary downlink allocation in the 11/12 GHz band would aid in the acceptance and standardization of these non-safety applications for aviation use.

Agenda Item 1.7 - *sharing between the mobile-satellite service and the space research service (passive) in the band 1 668-1 668.4 MHz, and between the mobile-satellite service and the mobile service in the band 1 668.4-1 675 MHz.* With regard to this agenda item, Canada indicated that it will participate in the sharing studies conducted by WP 8D to ensure that no undue constraints are imposed on existing services in the band.

The United States supports the completion of studies demonstrating how: a) Radio astronomy and Space Research (passive) services, and b) Radio astronomy stations and MetAids earth stations can be protected from interference from mobile earth stations, in the bands 1 668 – 1 668.4 MHz and 1 668.4-1 670 MHz, respectively. The United States also supports the completion of sharing studies between the mobile service and MSS in the band 1 668.4 – 1 675 MHz, recognizing that stations in the MSS shall not claim protection from fixed and mobile stations operating in the United States, as stated in the *resolves* of Resolution 744.

Agenda Item 1.8 - *studies on technical sharing and regulatory provisions for the application of high altitude platform stations operating in the bands 27.5-28.35 GHz and 31-31.3 GHz in response to Resolution 145 (WRC-03), and for high altitude platform stations operating in the bands 47.2-47.5 GHz and 47.9-48.2 GHz in response to Resolution 122 (rev. WRC-03).*

Resolution 122 (Rev. WRC-03)
Canada and the US agreed to participate in studies on the power limitations to be applied to HAPS ground stations to protect space station receivers in the 47.2-47.5 GHz and 47.9-48.2 GHz bands. Both administrations also agreed that co-frequency operation between HAPS and the other services is feasible. In addition, both administrations are of the view that further studies are required on the procedures of Article 9 for the coordination of HAPS as per *resolves* 2 and 3 of Resolution **122 (Rev. WRC-03)**. After completion of studies, Resolution **122 (Rev. WRC-03)** should be suppressed.

Resolution 145 (WRC-03)
Canada and the US will support the protection of other applications of the FS, specifically LMCS/LMDS, and other services allocated in this band, such as the FSS, from fixed service systems implementing HAPS. Canada further supports studies to identify a suitable common 300 MHz band within 27.5-28.35 GHz band as per *invites* 1 of Resolution **145 (WRC-03)**.

The United States is also of the view that:
1. HAPS use of the 31-31.3 GHz allocation must ensure protection from interference to the passive services operating in 31.3-31.8 GHz
2. The existing HAPS ground station power density limits described in No. 5.543A adequately protect passive satellite services operating in 31.3-31.8 GHz, yet provide sufficient power for operation of ground-to-HAPS links. The United States anticipates supporting no change to the existing No. 5.543A. The U.S. will participate in studies on the power limitations to be applied to HAPS ground stations to protect space station receivers.
3. The U.S. also supports the continued studies called for in Resolution **145 (WRC-03)** that will demonstrate whether HAPS can operate successfully on a non-interference/non-protected basis in the 28 GHz and 31 GHz bands, and the inclusion of the results of these studies, as appropriate, in ITU-R Recommendations. However, recognizing the regulatory status of this service in these bands, the United States does not support the specification of interference or sharing criteria for HAPS in ITU Radio Regulations for these bands.

Agenda Item 1.9 - *technical, operational and regulatory provisions applicable to the use of the band 2 500-2 690 MHz by space services in order to facilitate sharing with current and future terrestrial services without placing undue constraint on the services to which the band is allocated*
With regard to this agenda item:
Brazil indicated that in its view the technical, operational and regulatory provisions applicable to the use of the band 2 500-2 690 MHz by space services shall address full protection of current and future terrestrial services.

Canada supports participation in the work being carried out in JTG 6-8-9 which is studying sharing between space services and current and future terrestrial services in the band 2500-2690 MHz.

The United States:
- is of the view that the scope of this agenda item is restricted to consideration of technical, operational and regulatory provisions applicable to the use of the band 2 500-2 690 MHz by space services in order to facilitate protection of the terrestrial services in the band.
- supports the ongoing studies being conducted at ITU-R with the view to establishing necessary regulatory protection for the terrestrial services in the 2500-2690 MHz band.
- is of the view that allocations to satellite services in the band 2 500 - 2 690 MHz in Region 2 may be unnecessary.
- recognizes that since administrations in Region 2 have no plans for the implementation of the MSS systems in the band 2 500 – 2 690 MHz, there is a need to consider the feasibility of the primary allocations to MSS in the band 2 500 – 2 690 MHz in Region 2.
- supports NOC to RR footnotes 5.417A and 5.418 as adopted by WRC-03 relating to non-GSO and GSO BSS (sound) systems in the band 2 605-2 655 MHz.

Agenda Item 1.10 - *review of the regulatory procedures and associated technical criteria of Appendix 30B, without impact on existing allotments or assignments, Resolution 146 (WRC-03).*
With regard to this agenda item, at the December '04 meeting the U.S. and Canada agreed on the following Preliminary Views:
1. No direct actions on the allotments, the existing systems, or the assignments in the List of Appendix 30B will be supported under this agenda item. Only the consequential changes resulting from the modification of the technical and procedural aspects of Appendix 30B can be considered.
2. Support continued improvements to the regulatory procedures and associated technical criteria of Appendix 30B and are committed to working through the study groups and with other administrations toward that end with the intent of finding a way to make the band more useable without impact to existing users and minimize the regulatory burden to use the frequencies in the Plan.
3. These administrations consider that modified technical criteria should be based on realistic system parameters that reflect digital communications technology in use today and foreseen for the near future.
4. Further, U.S. and Canada consider that sufficient flexibility should be built into the procedures in Appendix 30B to permit reasonable accommodation of new technologies without requiring additional revisions to Appendix 30B post WRC-07.
5. They intend to focus their efforts on improvements to the regulatory procedures and associated technical criteria for the Ku-band portion of Appendix 30B, as they consider this offers the greatest opportunity for improvements that can yield cost-effective access to innovative consumer based satellite services. One consideration is that in all three Regions, the Ku allotment downlink bands are shared co-primary with the fixed service.

Agenda Item 1.11 - *sharing criteria and regulatory provisions for the protection of terrestrial services, in particular terrestrial television broadcasting services, in the 620-790 MHz band from GSO BSS networks and non-GSO BSS satellite networks or systems.*
In Canada, the 620-790 MHz band is used for the provision of terrestrial analog and digital television broadcasting services. Also as per FN 5.293, parts of this band will be used to provide special mobile services (i.e. for the. provision of public safety applications) and may, in the future, be used to provide other fixed and mobile services. Canada is not aware of any domestic interest in implementing BSS systems in this band. Consequently Canada plans to actively participate in the ITU-R studies requested in Resolution **545 (WRC-03)** with the main focus placed on ensuring adequate protection of the terrestrial services. Additionally, given the ubiquitous nature of the broadcast and mobile services, any constraints placed on the terrestrial services to protect the BSS service would not be acceptable to Canada.

Agenda Item 1.12 - *to consider possible changes in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference: "Advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks" in accordance with Resolution 86 (WRC-03);*

WRC-07 adopted a set of resolutions to address the issues under this agenda item: Resolution 88 which deals with the rationalization of Articles 9 and 11 of the Radio Regulations, Resolution 89 regarding the backlog of satellite network filings and Resolution 901 which concerns the extension of the coordination arc concept to new bands and services. The status of these issues at CITEL after the December '04 is as follows:

Resolution 88 - *Rationalization of Articles 9 and 11 of the Radio Regulations*

Preliminary views of Argentina, Brazil, Canada, Dominican Republic and United States:

1. These administrations support the continued modification, including simplification, of the Radio Regulations procedures that would facilitate their understanding and minimize the need for associated Rules of Procedure. These administrations are committed to working through the study groups and with other administrations toward that end.
2. At this preliminary stage, it is the view of these administrations that the work of the ITU staff could potentially be made more efficient and effective through modification of Articles 9 and 11 of the Radio Regulations. However, it is important to ensure that proposed modifications to rationalize and simplify Articles 9 and 11 do not alter the regulatory rights currently afforded to assignments of satellite network filings from the application of satellite coordination and notification procedures. Studies are required to determine which modifications of Articles 9 and 11, if any, would be appropriate.

Preliminary view of Argentina and Brazil:

In the context of agenda item 1.12, these administrations understand the term "rationalization" to mean clarification, simplification, and improvement of Articles 9 and 11 and not a complete replacement of Articles 9 and 11.

Resolution 89 - *Backlog in satellite filings*

Preliminary views of Argentina, Brazil and Canada:

These administrations are interested and will actively participate in the review of Appendix 4 data requirements in the ITU-R.

Preliminary view of Argentina and Canada:

These administrations support the initiative to automate the examination of filings for compliance with the requirements of Article 5 but do not view automation initiatives as WRC matters.

Preliminary view of Argentina and Brazil:

Removing any unnecessary data in Appendix 4 so as to reduce the processing time of a notice certainly will reduce the backlog of satellite filings. Additionally, the initiative to provide administrations with more user-friendly software for the validation of all electronic filings will have influence in the backlog of satellite filings. Argentina and Brazil understand that those initiatives sound appropriate for the moment and will participate and provide support to the Bureau when requested.

Resolution 901 - *Determination of the orbital arc separation for which coordination would be required between two satellite networks operating in a space service not subject to a plan*

Preliminary view of Argentina, Brazil, Canada and Dominican Republic:

These administrations have supported the coordination arc concept as currently reflected in the Radio Regulations as it facilitates the work of administrations and the Bureau. The extension of this concept to other frequency bands and other services need to be studied and these administrations will actively participate in the ITU-R activities in this area.

Agenda Item 1.13 - *Taking into account* **Resolutions 729 (WRC-97), 351 (WRC-03)** *and* **544 (WRC-03),** *to review the allocations to all services in the HF bands between 4 MHz and 10 MHz, excluding those allocations to services in the frequency range 7 000-7 200 kHz and those bands whose allotment plans are in* **Appendices 25, 26** *and* **27** *and whose channelling arrangements are in* **Appendix 17**, *taking account of the impact of new modulation techniques, adaptive control techniques and the spectrum requirements for HF broadcasting;*

The U.S. has no preliminary view on this agenda item. At the previous CITEL PCC II meeting (July ’04), US presented an information paper that provided background on this agenda item. At the December ’04 meeting, the U.S. maintained that the studies needed to form decisions on this issue have not been completed.

Canada supports the ongoing studies within ITU-R expert groups. Brazil and Argentina are of the view that status quo should be maintained in the bands between 4 and 10 MHz.

Agenda Item 1.14 - *Operational procedures and requirements of the Global Maritime Distress and Safety System (GMDSS) and other related provisions of the Radio Regulations*

With regard to this agenda item, Canada expressed a view that sufficient experience has been gained from GMDSS, such that appropriate and/or necessary changes to the Radio Regulations can be considered at this Conference.

The United States and Canada are of the view that the distress and safety communications, non-GMDSS, should be revised to accommodate interoperability with GMDSS. In particular, Chapter VII of the Radio Regulations should be revised. This interoperability is required to maintain Safety-of-Life at sea until the maritime community has fully transitioned to the GMDSS standard. In accordance with IMO recommendations, GMDSS ships continue to keep continuous guard on VHF channel 16 (156.8 MHz) with a view to maintaining communications between SOLAS and Non-SOLAS ships. The United States maintains that all vessels are encouraged to make use of the GMDSS as soon as possible. The IMO has authorized the discontinuance of a 2182 KHz guard for SOLAS vessels. Canada and United States, in recognition of its continuing domestic requirements regarding non-SOLAS vessels outside of VHF range, will maintain a 2182 kHz guard for the foreseeable future.

With regard to the use of new technologies for the maritime mobile service in the band 156-174 MHz and the consequential revision of Appendix **18** to reflect new technologies, Canada and United States supports and is implementing port and coastal systems in accordance with Recommendation ITU-R M.1371-1 for Automatic Identification System

(AIS). The further introduction of digital systems into this band should be based on adopting suitably modified land mobile technology into a worldwide interoperable standard. Appendix **18** should also be modified to reflect the current diminished demand for public correspondence coast stations.

Agenda Item 1.15 - *To consider a secondary allocation to the amateur service in the frequency band 135.7-137.8 kHz.* Canada, Argentina and Uruguay support a world-wide secondary allocation to the amateur service in the 135.7-137.8 kHz band with the necessary restrictions to protect existing services in the band.

Agenda Item 1.16 - *To consider the regulatory and operational provisions for Maritime Mobile Service Identities (MMSIs) for equipment other than shipborne mobile equipment, taking into account Resolutions 344 (Rev.WRC-03) and 353 (Rev.WRC-03)*-- The United States and Canada are in favor of the review of Recommendation ITU-R M.585 prior to WRC-07. These administrations consider that ITU-R M.585 should take into account the potential exhaustion of maritime identification digits (MIDs) and MMSIs, and compatibility with current uses of MMSIs. This review may lead to recommendations for changes to the Radio Regulations. RR Article 19 should be modified to allow for assignment of MMSIs to aeronautical stations involved in maritime SAR.

Agenda Item 1.17 - *allocation to the FSS for feeder links for non-geostationary-satellite networks in the mobile-satellite service with service links below 1 GHz in the bands 1390-1392 MHz (Earth-to-space) and 1430-1432 MHz (space-to-Earth).* With regard to this agenda item, Canada noted that this issue was extensively discussed at WRC-03. Canada seeks to ensure the protection of the existing services in this and adjacent bands (fixed and radiolocation services in particular). Canada will participate in studies on this issue to ensure that any adopted sharing criteria adequately protect the incumbent services.

Agenda Item 1.18 - *pfd limits in the band 17.7-19.7 GHz for satellite systems using highly inclined orbits.*
Canada and the United States support no change to the pfd limits in Table **21-4**, Article **21.** The current pfd limits are adequate to protect the terrestrial services from non-GSO FSS satellites in highly-elliptical orbits operating in the 17.7-19.3 GHz band. The United States also expressed the following views:

1. That Agenda Item 1.18 and its associated resolution, although ambiguously worded so as to encompass some circular-orbit non-GSO systems that meet the apogee altitude and orbital inclination criteria in *considering g)* of Resolution 141 (WRC-03), was intended to apply to highly-inclined (i.e., between 35º and 145º) non-circular-orbit non-GSO FSS satellite systems with orbital apogee altitudes greater than 18,000 km and orbital perigee altitudes that are less than the orbital apogee altitudes. Consequently, there is no need to review the limits that apply to those non-GSO satellite systems using circular orbits, such as medium earth orbits (MEO) that satisfy both the apogee altitude criterion and the inclination criterion.
2. ITU-R studies on sharing between non-GSO systems in the 17.7-19.7 GHz band using HIOs and FS networks in the same band should continue. Studies will be

improved by using realistic assumptions both for the relevant characteristics of the fixed-satellite service – including the number of active HEO/HIO satellites in view of a particular fixed service station – and for the relevant characteristics of fixed service systems.

3. Satellite networks using HIOs should continue to be considered as non-GSOs and have the same regulatory standing as other types of non-GSOs such as those in low and medium earth orbits. There is no need to modify the Radio Regulations in a way that categorizes HIO non-GSO operations separately from other non-GSO systems.

At December '04 meeting only minor adjustment were made to the PVs & background. None of the changes were substantive.

Agenda Item 1.19 - *spectrum requirements for global broadband satellite systems in order to identify possible global harmonized FSS frequency bands for the use of Internet applications, and consider the appropriate regulatory/technical provision*s.

At the December '04 meeting, United States, Brazil and Canada agreed on the following views:

1. There are many existing and planned systems in a number of different FSS frequency bands fully capable of providing broadband/Internet applications on a global basis. It would be counter-productive to identify any subset of frequencies, especially for Internet applications
2. The current Radio Regulations for access, coordination and notification of satellite networks fully accommodate the ability of FSS systems to provide Internet access.
3. The commercially available ground equipment suitable for broadband/Internet applications is frequency agile and is fully capable of operating with the existing and planned FSS satellite systems in the allocated frequency bands.
4. The identification of specific FSS frequency bands for Internet applications will not improve or facilitate the provision of these applications. No changes should be made to the Radio Regulations in connection with this agenda item.

Agenda Item 1.20 - *regulatory measures for the protection of the Earth exploration-satellite service (passive) from unwanted emissions of active services.*

With regard to this agenda item Canada expressed its intention to participate in the compatibility studies to be carried out by TG 1/9, paying particular attention to the Earth exploration satellite passive service and the active services bands of interest to Canada. Canada is of the view that the studies under this agenda item should be limited to the specific bands identified in the resolution.

Agenda item 1.21 - *compatibility between radio astronomy service and active space services.*

Canada and U.S. agreed that satisfactory studies in ITU-R TG 1/9 need to be completed before a determination is made regarding adding any of pairs contained in Resolution **740** to the Table in Resolution **739**. The studies must identify the appropriate threshold levels for consultation and the impact on the concerned active and passive radio services. CITEL administrations intend to participate in the compatibility studies to be carried out by ITU-R TG 1/9. Canda and U.S. also agreed that the scope of Agenda Item 1.21 is

limited to consideration of the band pairs in the table of Resolution **740** (and the associated threshold levels for consultation), for the purpose of making appropriate additions from this table to the existing tables in Resolution **739**. Any other proposals for modifications to Resolution **739** would be contrary to the intent and outside the scope of this agenda item.
At the December '04 meeting only minor/editorial edits were made to this PV.

Agenda Item 2 – *to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution 28 (Rev.WRC-03), and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with principles contained in the Annex to Resolution 27 (Rev.WRC-03);*
Argentina, Canada, Dominican Republic and United States are of the view that Resolutions **27** and **28** provide clear guidance on the principles and application for incorporating by reference ITU-R Recommendations in the Radio Regulations. Consequently, no revisions to these Resolutions are necessary at this time. WRC-07 should follow the incorporation by reference process in Resolution 27 (Rev.WRC-03) and Resolution 28 (Rev.WRC-03). Administrations should, in accordance with Resolution 28, review those revised ITU-R Recommendations listed by the Director to the CPM and communicated by the Radiocommunication Assembly to the WRC to determine whether the updated version should be incorporated by reference in the Radio Regulations in place of the previous version.

Next meeting
The next meeting of CITEL PCC II is scheduled for 26-29 April 2005, in Guatemala.